13. *Special considerations for railroad bridges.*

Railroad bridges differ from other types of bridges in the types of loads they carry, in their modes of failure and indications of distress, and in their construction details and components. Proper inspection and analysis of railroad bridges require familiarity with the loads, details and indications of distress that are unique to this class of structure. Particular care should be taken that modifications to railroad bridges, including retrofits for protection against the effects of earthquakes, are suitable for the structure to which they are to be applied. Modifications should not adversely affect the serviceability of neither the bridge nor its accessibility for periodic or special inspection.

14. *Railroad implementation of bridge safety programs.*

FRA recommends that each track owner or other entity which is responsible for the integrity of bridges which support its track should comply with the intent of this regulation by adopting and implementing an effective and comprehensive program to ensure the safety of its bridges. The bridge safety program should incorporate the following essential elements, applied according to the configuration of the railroad and its bridges. The basis of the program should be in one comprehensive and coherent document which is available to all railroad personnel and other persons who are responsible for the application of any portion of the program. The program should include:

(a) Clearly defined roles and responsibilities of all persons who are designated or authorized to make determinations regarding the integrity of the track owner's bridges. The designations may be made by position or by individual;

(b) Provisions for a complete inventory of bridges that carry the owner's track, to include the following information on each bridge:

(1) A unique identifier, such as milepost location and a subdivision code;

(2) The location of the bridge by nearest town or station, and geographic coordinates;

(3) The name of the geographic features crossed by the bridge;

(4) The number of tracks on the bridge;

(5) The number of spans in the bridge;

(6) The lengths of the spans;

(7) Types of construction of:

(i) Substructure;

(ii) Superstructure; and

(iii) Deck;

(8) Overall length of the bridge;

(9) Dates of:

(i) Construction;

(ii) Major renovation; and

(iii) Strengthening; and

(10) Identification of entities responsible for maintenance of the bridge or its different components.

(c) Known capacity of its bridges as determined by rating by competent railroad bridge engineer or by design documents;

(d) Procedures for the control of movement of high, wide or heavy loads exceeding the nominal capacity of bridges;

(e) Instructions for the maintenance of permanent records of design, construction, modification, and repair;

(f) Railroad-specific procedures and standards for design and rating of bridges;

(g) Detailed bridge inspection policy, including:

(1) Inspector qualifications; including:

(i) Bridge experience or appropriate educational training;

(ii) Training on bridge inspection procedures; and

(iii) Training on Railroad Workplace Safety; and

(2) Type and frequency of inspection; including:

(i) Periodic (at least annually);

(ii) Underwater;

(iii) Special;

(iv) Seismic; and

(v) Cursory inspections of overhead bridges that are not the responsibility of the railroad;

(3) Inspection schedule for each bridge;

(4) Documentation of inspections; including:

(i) Date;

(ii) Name of inspector;

(iii) Reporting Format; and

(iv) Coherence of information;

(5) Inspection Report Review Process;

(6) Record retention; and

(7) Tracking of critical deficiencies to resolution; and

(h) Provide for the protection of train operations following an inspection, noting a critical deficiency, repair, modification or adverse event and should include:

(1) A listing of qualifications of personnel permitted to authorize train operations following an adverse event; and

(2) Detailed internal program audit procedures to ensure compliance with the provisions of the program.

APPENDIX B TO PART 237—SCHEDULE OF CIVIL PENALTIES

APPENDIX B TO PART 237—SCHEDULE OF CIVIL PENALTIES [1]

Section [2]	Violation	Willful violation
Subpart B—Railroad Bridge Safety Assurance		
237.31 Adoption of bridge management program	$9,500	$17,000
237.33 Content of bridge management program:		
(a) Inventory of railroad bridges	2,500	5,000
(b) Record of safe load capacity	5,500	10,000
(c) Provision to obtain and maintain:		
(i) Design documents	5,500	10,000
(ii) Documentation of repairs and modifications	2,500	5,000
(iii) Inspection reports	2,500	5,000
(d) Bridge inspection program content	2,500	5,000
Subpart C—Qualification and Designation of Responsible Persons		
237.51 Railroad bridge engineers:		
(a) Competency	5,500	10,000
(b) Educational qualification	2,500	5,000
237.53 Railroad bridge inspectors	5,500	10,000
237.55 Railroad bridge supervisors	5,500	10,000
237.57 Designation of individuals	2,500	5,000
Subpart D—Capacity of Bridges		
237.71 Determination of bridge load capacities:		
(a) Safe load capacity	5,500	10,000
(b) Load capacity documented	5,500	10,000
(c) Load capacity determined by a railroad bridge engineer	5,500	10,000
(d) Method of load capacity determination	2,500	5,000
(e) Prioritization of load capacity determination	2,500	5,000
(f) New load capacity determined due to change in condition	2,500	5,000
(g) Load capacity stated in terms of weight and length of equipment	2,500	5,000
(h) Restriction on operations by railroad bridge engineer	5,500	10,000
237.73 Protection of bridges from over-weight and over-dimension equipment:		
(a) Instructions issued	5,500	10,000
(b) Weight instructions	2,500	5,000
(c) Dimensional instructions	2,500	5,000
(d) Incorrect instructions issued	2,500	5,000
Subpart E—Bridge Inspection		
237.101 Scheduling of bridge inspections:		
(a) Scheduling:		
(i) Failure to inspect	9,500	17,000
(ii) Inspection within calendar year	2,500	5,000
(iii) Inspection frequency exceeding 540 days	2,500	5,000
(b) Increased inspection frequency	5,500	10,000
(c) Special inspections	2,500	5,000
(d) Resumption of railroad operations prior to inspection & review	9,500	17,000
237.103 Bridge inspection procedures	2,500	5,000
237.105 Special inspections:		
(a) Procedures to protect train operations and requiring special inspections	2,500	5,000
(b) Provision for the detection of scour or underwater deterioration	2,500	5,000
237.107 Conduct of bridge inspections	5,500	10,000
237.109 Bridge inspection records:		
(a) Record of inspection	2,500	5,000
(b) Inspection record:		
(i) Certification and date	2,500	5,000
(ii) Falsification	.....	17,000
(c) Inspection record information	2,500	5,000
(d) Initial report within 30 days	2,500	5,000
(e) Final inspection report within 120 calendar days	2,500	5,000
(f) Retention	2,500	5,000
(g) Prompt reporting of dangerous conditions	5,500	10,000
237.111 Review of bridge inspection reports.		
(a) Review by railroad bridge engineers and supervisors	2,500	5,000
(b) Appropriate action concerning present or potential safety hazards	5,500	10,000
(c) Modification of inspection frequency or procedures	2,500	5,000
(d) Scheduling remedial action	2,500	5,000
(e) Higher-level review	2,500	5,000
Subpart F—Repair and Modification of Bridges		
237.131 Design	5,500	10,000

APPENDIX B TO PART 237—SCHEDULE OF CIVIL PENALTIES [1]—Continued

Section [2]	Violation	Willful violation
237.133 Supervision of repairs and modifications	5,500	10,000
Subpart G—Documentation, Records and Audits of Bridge Management Programs		
237.151 Audits; general	2,500	5,000
237.153 Audits of inspections	2,500	5,000
237.155 Documents and records:		
(a) Electronic recordkeeping, general	2,500	5,000
(b) System security	2,500	5,000

[1] A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to $100,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A.

[2] The penalty schedule uses section numbers from 49 CFR part 237. If more than one item is listed as a type of violation of a given section, each item is also designated by a ''penalty code,'' which is used to facilitate assessment of civil penalties, and which may or may not correspond to any subsection designation(s). For convenience, penalty citations will cite the CFR section and the penalty code, if any. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined CFR and penalty code citation, should they differ.

PART 238—PASSENGER EQUIPMENT SAFETY STANDARDS

Subpart A—General

Sec.

Subpart B—Safety Planning and General Requirements

Subpart C—Specific Requirements for Tier I Passenger Equipment